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Combat Crew

Strategic Air Command

SEPTEMBER 1985

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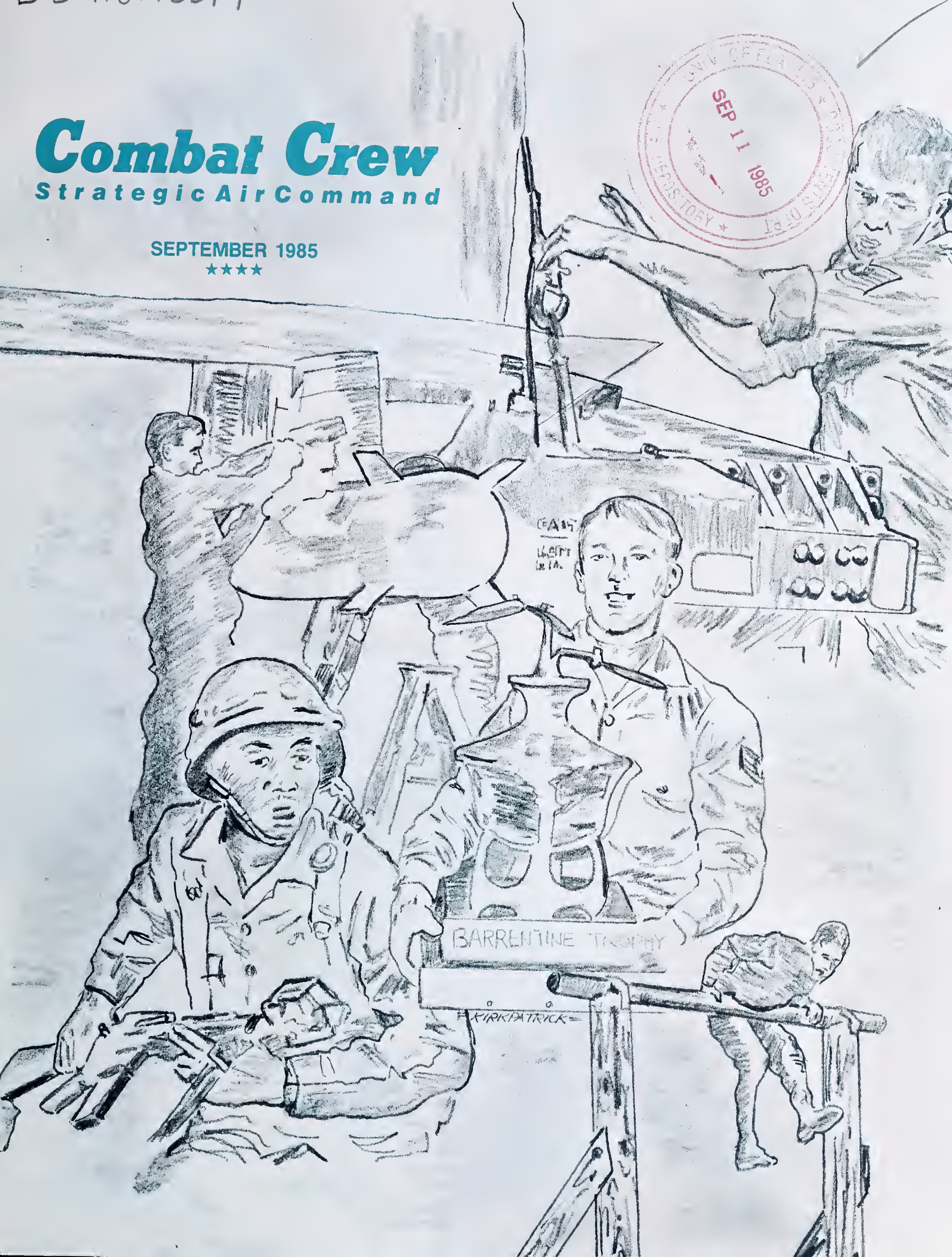

Combat Crew

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ON OUR COVER

Combat Crew salutes the hard working people who will participate in the 1985 SAC Combat Weapons Loading Competition.

SACRP 127-1 VOL. XXXV NO. 9 SEPTEMBER 1985

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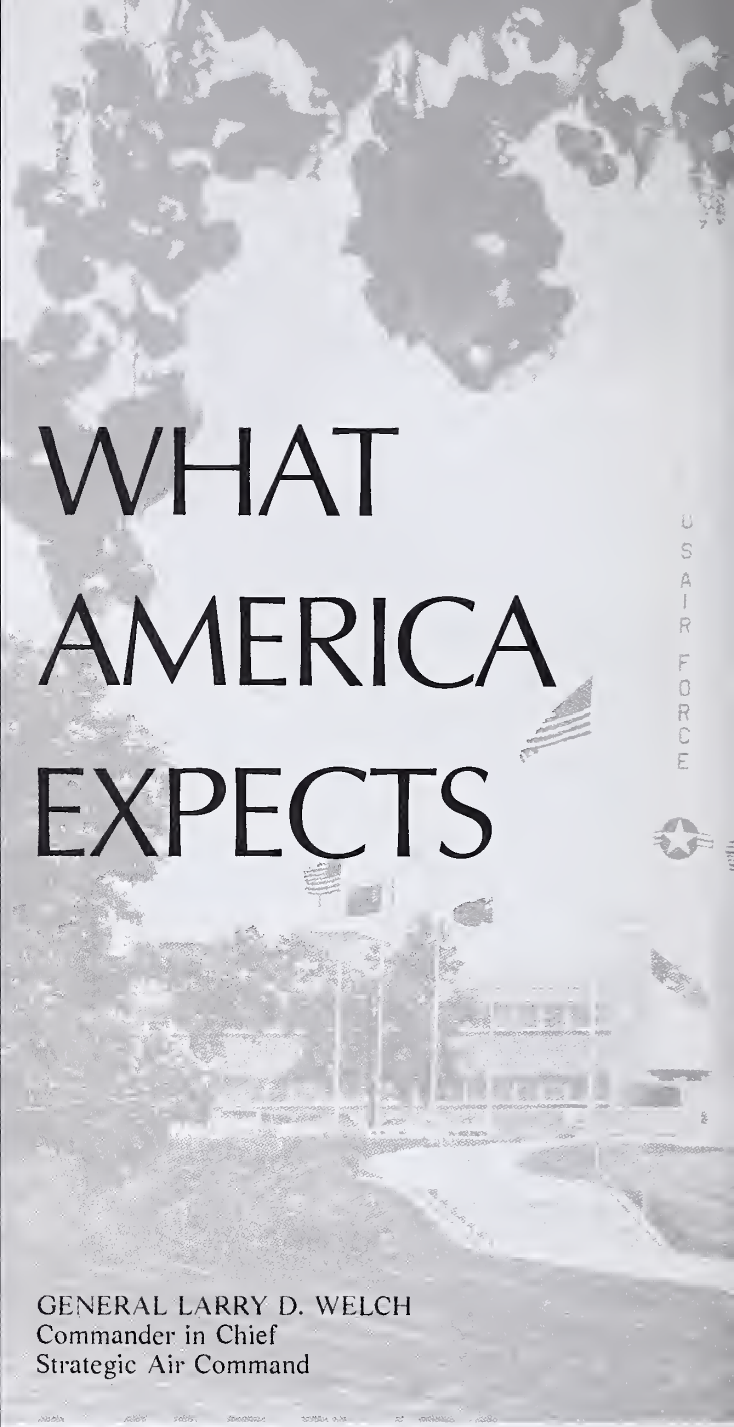
Contributions are encouraged as well as comments and criticism. Direct correspondence with the Editor is authorized. Address correspondence to Editor, Combat Crew, HQ SAC/IGFE Offut AFB, NE 68113. AV 271-2620.



WHAT AMERICA EXPECTS

GENERAL LARRY D. WELCH
Commander in Chief
Strategic Air Command

It is a fact of history that during the past 4000 years the world has enjoyed only 300 years of freedom from armed conflict. Forty years ago this month, the end of World War II marked the dawn of two forces with a great potential for devastating armed conflict — nuclear power as a weapon of war and the Soviet Union as a military superpower. Since then, the Soviets have made it clear they are a determined adversary dedicated to the aggressive pursuit of interests and policies incompatible with those of free people everywhere. It has become equally clear that this aggressive Soviet behavior centers on military power and the threat of military force. Our continuing national challenge is to counter this out-of-balance but committed adversary — to discourage Soviet adventurism, and deter Soviet aggression

at all levels. That, as every combat crew member clearly understands, is the overriding goal of the men and women of Strategic Air Command.

It has become fashionable over the years to debate what it takes to deter. The answer to that question is not all that complicated. What deters the Soviets or any other adversary is the fear that the price of aggression will be higher than they could afford to pay. It is our job to leave no doubt in the minds of a potential aggressor that an attack on us could bring prompt, devastating retaliation and losses far in excess of any possible gain. Our strategic forces, and the dedication of the men and women who operate, maintain and support those forces, provide that guarantee.

For over twenty years our **TRIAD** of strategic forces has successfully deterred nuclear attack against the U.S. and our allies, and has extended deterrence downward to discourage conflict at lower levels. Today we are well along in modernizing those strategic forces to ensure we will continue to maintain that deterrence in the future. The Air Force leadership, the Secretary of Defense and the President strongly support completing the full planned modernization program.

But while modernized strategic forces are an essential prerequisite for deterrence, it is the skill, dedication, and innovative spirit of the people of Strategic Air Command, with our combat crews in the forefront, that turn potential into tangible deterrence. Nothing is more important to success than the daily performance of those who man and support our weapon systems. It's the daily initiative, innovation and courage of the commander on the scene and his people that ensure successful deterrence.

In peace, as in war, success comes from ensuring the commander on the scene and his people have the resources, the authority, the responsibility and the training to make the most of each situation as it unfolds. Nothing less will ensure the professional competence required to accomplish the SAC mission — the most important mission of any military force in the free world.

To that end, I strongly encourage commanders and supervisors at all levels to exercise the full limits of your authority to do the job better, to insist on full and open communications with your people, and to insist on the highest professional standards in everything we do. That includes communicating your needs up the chain clearly and forcefully.

As long as we provide the environment necessary for our people to do their best, the future of this command will be very bright. That, coupled with the modernization of our strategic forces, gives me total confidence Strategic Air Command can continue to guarantee the peace. The American people need, and have every right to expect, our very best. **I know they'll get it.★★★★**

1985 SAC Combat Weapons Loading Competition

Capt Sheila Disbrow
HQ SAC/LGWM

The Ellsworth crowd went wild as the home town **"Bandits"** from the 28th BMW captured the 1984 SAC Combat Weapons Loading Competition Barrentine Trophy.

This year, on 19-26 September, 16 bomb wings will converge on Ellsworth for the **1985 SAC Combat Weapons Loading Competition.** Every visiting team's goal is to recapture the Barrentine from Ellsworth and take home "Best in SAC" honors.

SAC Combat Weapons Loading Competition (Load Comp) pits SAC's finest munitions load crews, security police, and aircraft crew chiefs against each other in an outstanding demonstration of the technical skills which are so vital to our strategic deterrent mission. The competition also provides a forum for some of SAC's top professionals to exchange ideas and learn by example from their peers. First and foremost, the competition is a source of recognition for those personnel who are the backbone of the SAC mission, yet are often taken for granted during day-to-day peacetime operations.

Specifically, each competition team is composed of a five person munitions load crew, an aircraft crew chief, a six person security police element, and a team project officer and noncommissioned officer. Munitions loading will be accomplished on ASQ-38 and Offensive Avionics System (OAS) modified B-52G and H aircraft and an FB-111. Each load team is evaluated on the condition of its equipment, two munitions loads, and a written test. The maximum possible score for each load team has increased from 1250 to 1400 points this year. Security police teams compete in a practical exercise, confidence course, tactical weapons firing, and a written test. Their maximum score is 1200 points. Aircraft crew chiefs perform aircraft preload and postload exercises and take a written exam for a maximum total of 400 points.

The wing team which scores the closest to 3000 points overall is awarded the Barrentine Memorial Trophy, named for CMSgt Wilbur R. Barrentine, a member of SAC from the mid-fifties until his death in 1970. Other major awards include Best Munitions Load Crew, Best Security Police Unit, Best Bomber Crew Chief, Best Air Launched Cruise Missile (ALCM) Load Crew, and Best Combined Load Crew.

This September's competition will be number sixteen for SAC. "Many of the changes incorporated into the competition last year resulted in an exciting, more challenging competition," according to Lt Col Robert

Rudgis, SAC project officer for the 1985 Load Comp. "So, with a year to further fine tune ALCM loading and the M-16 Tactical Weapons Firing course, we expect the best competition ever in 1985." The first ever winners of the ALCM loading, Griffiss AFB, and the Tactical Weapons Firing, Mather AFB, will be looking to keep those trophies! Rest assured, they'll have their hands full with all the hungry competitors attempting to chew up their established records.

Preparation for Weapons Loading Competition is well underway at all 16 participating units. Hard work, practice, demonstrations and lots of teamwork have dominated the summer for these dedicated competitors. The quest for the Barrentine is a wing-wide effort and every wing wants to win. Good luck to all teams as you compete to be the "**Best in SAC.**"

RECENT AWARD WINNERS

BARRENTINE WINNERS

1984	28 BMW Ellsworth AFB SD
1983	416 BMW Griffiss AFB NY
1982	28 BMW Ellsworth AFB SD
1981	19 BMW Robins AFB GA
1980	97 BMW Blytheville AFB AR

BEST MUNITIONS LOAD CREW

1984	93 MMS Castle AFB CA
1983	43 MMS Andersen AFB GU
1982	410 MMS K I Sawyer AFB MI
1981	93 MMS Castle AFB CA
1980	509 MMS Pease AFB NH

BEST SECURITY TEAM

1984	44 SPS Ellsworth AFB SD
1983	320 SPS Mather AFB CA
1982	44 SPS Ellsworth AFB SD
1981	19 SPS Robins AFB GA
1980	97 SPS Blytheville AFB AR

BEST AIRCRAFT CREW CHIEF

1984	28 OMS Ellsworth AFB SD
1983	42 OMS Loring AFB ME
1982	28 OMS Ellsworth AFB SD
1981	380 OMS Plattsburgh AFB NY
1980	416 OMS Griffiss AFB NY

SAC Accepts First B-1B

"It's a great day for this great country of ours, for the state of Texas, for the United States Air Force and Strategic Air Command. It is one superb airplane, the finest in the world and will certainly serve the call of deterrence very, very well. To all of you, active and retired, all of you in government and the Congress, I can't begin to tell you how grateful I am as SAC commander in chief for all your help."

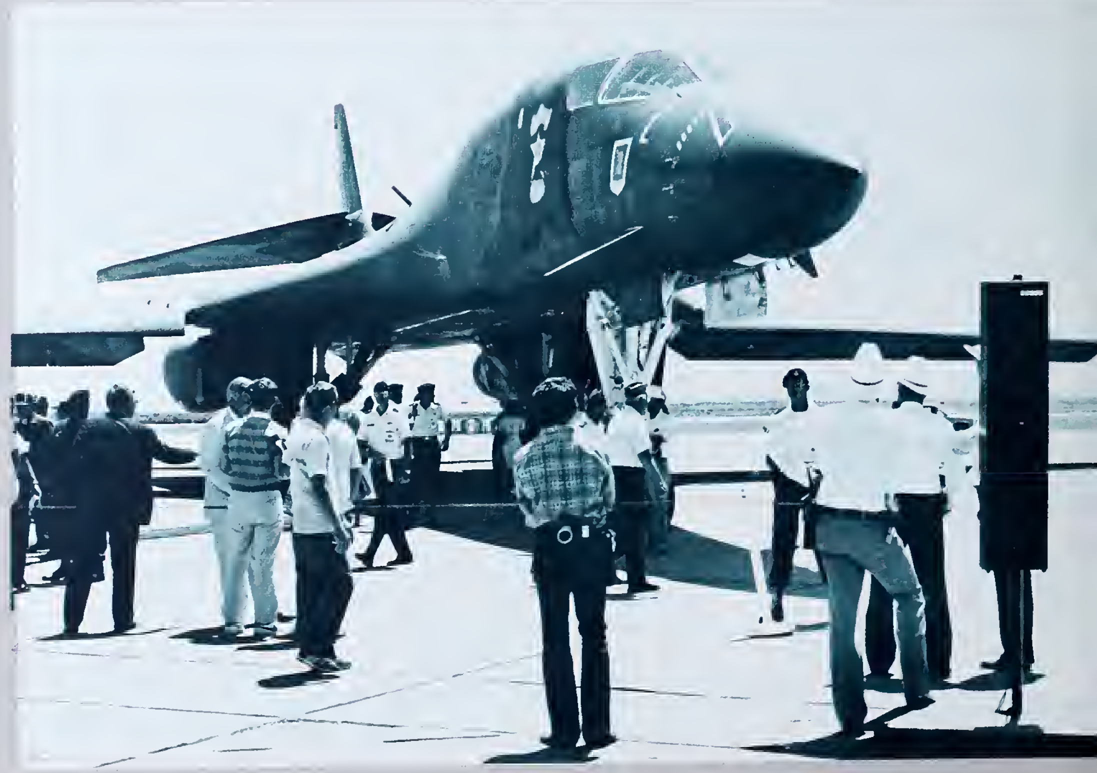
With these words, Gen Bennie L. Davis welcomed the first B-1B into SAC's operational inventory. Gen Davis spoke before an estimated crowd of 45,000 at Dyess AFB, TX, on June 29th.

Before the aircraft landed at Dyess, government leaders from the state of Texas, distinguished guests and general officers including Gen John J. Vessey, chairman of the Joint Chiefs of Staff, were introduced. Then the

The first B-1B to be introduced into SAC's operational inventory performs a low level pass over Offutt AFB's runway on June 27th.

General Bennie L. Davis, then SAC's commander in chief, answers questions for the news media following B-1B arrival ceremonies at Dyess AFB on June 29th.

Photos by Maj John P. Priecko



"The Star of Abilene," the first B-1B to touch down in Texas, is named for the community which provides outstanding support to Dyess AFB.

sleek B-1B touched down at 2:00 p.m. after making three low level passes over the runway.

The traditional "passing of the records" followed. Lt Gen William E. Thurman, vice commander of Air Force Systems Command, gave them to Gen Davis; who passed them to Lt Gen James E. Light Jr., commander of 15th Air Force; who handed them to Brig Gen Pintard M. Dyer III, commander of the 12th Air Division; who passed them to Col Alan V. Rogers, commander of the 96th Bombardment Wing, home of the first B-1B.

The arrival of the B-1 at Dyess AFB brought with it both a sigh of relief and a renewed sense of urgency to the people there; while it meant the end to all the hard work preparing for its arrival, it also brought the challenges of a new era.

Lt Gen James E. Light, Jr, commander of 15th Air Force, discusses SAC's newest weapon system with civilian dignitaries.

Col Alan V. Rogers, 96th Bomb Wing commander, Dyess AFB, expresses his pride, enthusiasm and support for the world's most advanced strategic weapon system. Dyess AFB will be the home of 29 B-1Bs.

Lt Col Frank T. Birk, chief B-1B systems command test pilot, answers numerous questions from the estimated crowd of 45,000 gathered to get a glimpse of history in the making.

While at Dyess, General Davis also took part in dedication ceremonies for Davis Hall, the soon to be completed 4018 Combat Crew Training School facility for training all B-1B aircrews.

Systems Acquisition—

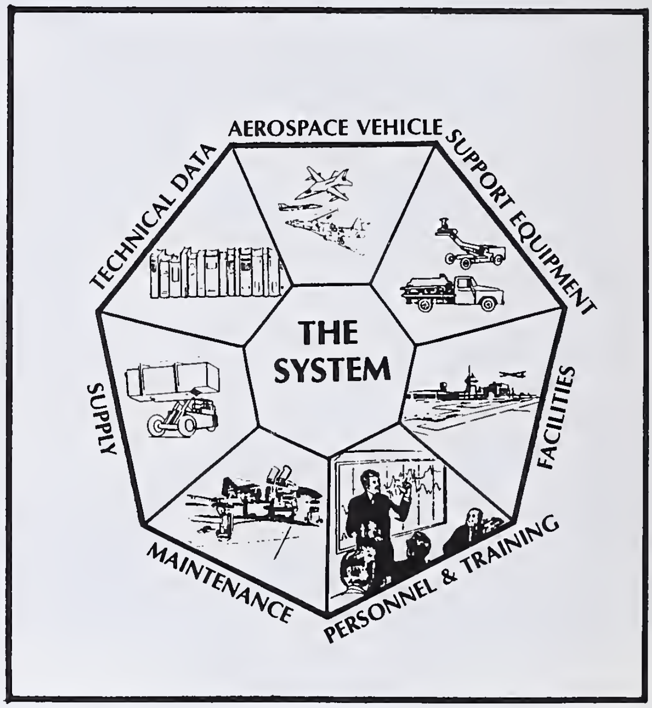
Cautiously Leaping into an Uncertain Future

Lt Col Ken Beeck
HQ SAC/XPI

"What's the holdup? Why is it taking so long? . . . Several years ago, shortly after I was certified as a crewmember, I heard all about the new system and its high-tech features. They made it more survivable, responsive, and accurate. I was told then that with this new platform we would once again pose a credible deterrent to the Soviets. Now, I'm wondering if I'll ever see it, let alone operate it!"

The frustrated crewmember in the above conversation could easily have been a pilot waiting to fly the ultramodern **B-1B** or a missileer anticipating the arrival of **PEACEKEEPER.** Both systems took years to develop, and only now are they finally clearing the remaining hurdles to join the SAC inventory. In a country famous for harnessing the atom and putting men on the moon, why does it take so long to acquire new weapon systems in relatively old mission areas such as bombers and missiles? In order to find an answer to this question, let's take a look at the realities of the acquisition process that SAC planners and programmers face daily in an effort to maintain an optimum force structure capable of preserving deterrence.

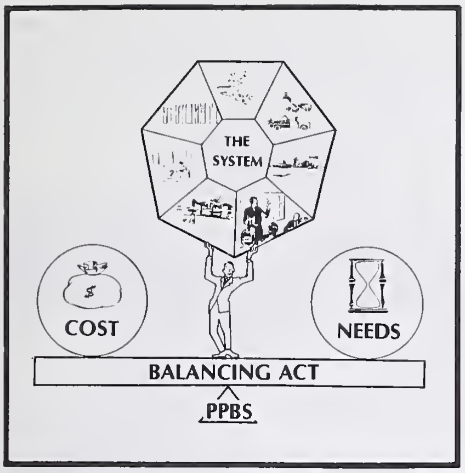
At first glance, the acquisition process appears to be relatively simple. A need is identified. Various alternatives for satisfying the need are explored—many include concepts requiring the development of entirely new hardware. The most promising alternatives are then demonstrated and validated. Those few which appear most feasible enter full scale development.

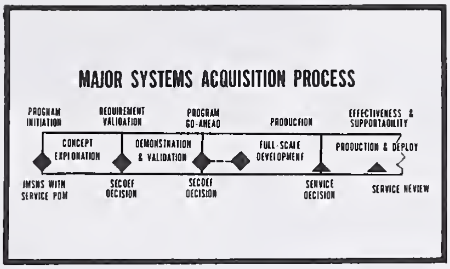


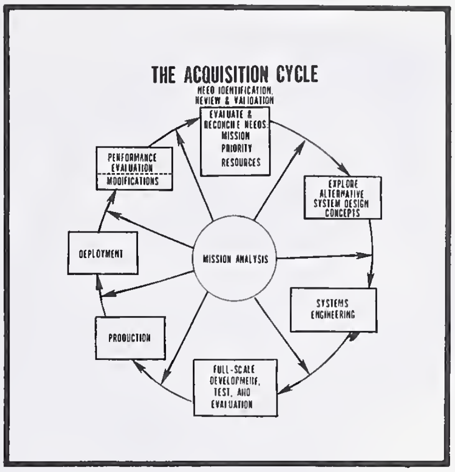
After the prototype systems have been tested and evaluated, only the best one is selected for production and eventual deployment. Following need identification, each step (or milestone) of the acquisition process requires formal approval by a high level decision maker, usually the Secretary of the Air Force or the Secretary of Defense. As a rule, the more complex (and expensive) the new system, the longer the acquisition cycle. You've probably guessed by now that this matter can get much more complicated. Any one of several problems can hold up the process.

Problems

Accurately identifying needs is a problem planners face from the very beginning of their planning cycles. Seldom do needs jump out, as was the case in the launching of Sputnik. On the contrary, they generally result from a continuous and painstaking analysis of the mission. Force structure planners must meticulously relate all present and planned weapons to specifically-identified threats. Reliable intelligence data is






THE ACQUISITION CYCLE
NEED IDENTIFICATION, REVIEW & VALIDATION
EVALUATE & RECONCILE NEEDS: MISSION PRIORITY RESOURCES
EXPLORE ALTERNATIVE SYSTEM DESIGN CONCEPTS
SYSTEMS ENGINEERING
FULL-SCALE DEVELOPMENT, TEST, AND EVALUATION
PRODUCTION
DEPLOYMENT
PERFORMANCE EVALUATION
MODIFICATIONS
MISSION ANALYSIS

absolutely critical to the successful development of systems for the "out years."

Another, and perhaps the most perplexing problem, is that of funding. As we in the military know full well and despite what we read in the newspapers, the defense pocket is far from bottomless. Costs must be balanced with needs. DOD's totally awesome Planning, Programming, and Budgeting System (PPBS) is the logical process we have for identifying needs, determining resource requirements, and allocating the resources for a given fiscal year. A full PPBS cycle takes years to complete, with the budget execution for the current year overlapping the Congressional approval process for the next. This causes changes in the programming for the year after that and adjustments to the planning parameters for the year beyond. Bridging the gap between planning and budgeting are the programmers, who define the next five years in terms of dollars, forces, and manpower. Using a document known as the Program Objectives Memorandum or POM, programmers from each service advocate requirements in a manner which follows general guidance from the President and the Department of Defense. Each year, every weapon system within an acquisition cycle must, in effect, stand the test of being fully cost-justified. Much time and effort is expended here in SAC/XP to ensure that those systems absolutely essential to the security of the nation are adequately defended. A significant part of the Program Manager's job is to review the new system's progress and ensure that documentation proper, precise and complete. This is a prudent way to prevent competing programs from supplanting one which meets a real and urgent need.

Program concurrency is another major challenge, especially in the larger acquisition efforts. The B-1B, with its myriad of subsystems, provides a good example. It was simply not feasible to develop each subsystem in series and then test the final product. Hundreds of assemblies were developed independently, without benefit of a full system test. As testing proceeds, it is entirely possible that several design changes will be needed. For those critical to the safety of crewmembers or required mission effectiveness, immediate changes to all B-1B aircraft are made. Other changes, either before or during production, will be implemented later by means of retrofits or TCTOs. All changes, whether immediate or delayed, represent additional measures of time and expense.

In acquiring any new weapon system, considerations far exceed just the machine itself. Support, for example, is a critical element. The aerospace support network comprises the equipment, facilities, maintenance, supply, technical data, personnel, and training programs needed to keep the system going. Without any one of these important functions, the entire operation grinds to a halt. Installing **PEACEKEEPER** in **MINUTEMAN** silos, for example, required extensive facilities preparations, including an exhaustive environmental impact study for an area covering hundreds of square miles! And that followed years of bitter debate over the selection of a **PEACEKEEPER** basing mode.

The problems mentioned so far clearly reflect the dynamic nature of the acquisition process. By no means is the list complete, as further examples will show. Over 5200 contracting firms from every state in the union are counted on to produce and support the B-1B. Of these, there are several "sole source" vendors, who, if behind in their production schedules, can hold up the entire assembly line. Thousands of players from the private sector, the Air Force and Department of Defense are drawn into virtually every phase of acquisition, which is laboriously spelled out in at least six volumes of regulations directives. In fact, while you've been reading this article, several new acronyms have more than likely been added to the hundreds already used to describe the bureaucratic interrelationships of these players.

Headquarters SAC program officers and planners have grown to be intimately familiar with the problems and frustrations that go with the acquisition process. Concerned attempts are being made within SAC, the Air Force, and the DOD to make it more responsive. Hopefully, armed with the knowledge that our present system is by nature rigorous and disciplined and that it is designed to get the most defense out of the defense dollar, crewmembers will understand that the new systems being worked today reflect our best efforts in preparing to meet the uncertainties of tomorrow.

Lt Colonel Norm Hythecker
Central Flight Instructor Course
Carswell AFB, TX

One Down — Three to Go

This article originally appeared in Combat Crew in September 1979. CFIC felt it was time to take a second look in case you find yourself with "one down — three to go." — ed.

One Down Three to Go — to most KC-135 pilots this phrase has little meaning. But if you've ever been one of the few pilots unlucky enough to lose an engine on initial takeoff or during a touch and go you might feel this phrase has more significance.

If you've ever lost an engine during takeoff phase, obviously you did the right thing and continued to fly the airplane. If this is so — you probably don't need to read on, but if you haven't experienced an engine failure and want to stack "luck" in your favor you might want to read and consider the factors of performance and control that affect our aircraft in an asymmetric condition.

Most 135 pilots can quote the tech order procedures for "Engine Failure Takeoff Continued," chapter and verse. They have practiced these procedures over and over in the CPT and in flight from 200′ above the field elevation. Some have even been able to practice engine failures (simulated) on the runway in CCTS training or in CFIC, but these were all controlled situations. What happens when we lose an engine for the first time unexpectedly? Will you be ready? Are the conditions the same? Will knowledge of procedures alone be enough?

As a SAC Hanger Flying videotape says, "Procedural knowledge is not enough. You need to mentally and physically prepare to lose an engine **Every Time You Take Off** in the KC-135."

Being aware of our performance factors, airfield and terrain considerations, tech order procedures, air traffic control limitations and the overall flying environment can help, but there is more we can do to be ready for unexpected engine loss.

Try to analyze the entire situation. Where will the engine failure occur? On the runway just after S-1? Just after rotation? In the climbout? Just after power is set on the Touch and Go? What could distract or confuse me? An explosion? Visible Fire? Cockpit indications? Radio or interphone calls? How will I react? What are my visual cues to fly the airplane? If you mentally prepare by answering these and other similar questions, the odds to successfully survive are in your favor.

The tech order talks about physical preparation — seatbacks vertical, pedals adjusted, etc. Don't consider these aspects too lightly. It can be awfully frustrating and down right dangerous to find yourself out of position or locked into a bad position if you need to make controls inputs in an unusual situation.

Performance Vs Control

Keeping in mind what we said about mental and physical preparation, let's look at performance and control factors that affect us on takeoff.

Most tanker pilots hate to see those heavy weight takeoffs on the 60-9 weekly flying schedule. Invariably they ask themselves what the scheduler has against them and continue with — "Don't they know what'll happen if I lose an engine in that beast?" Few pilots take solace in the fact that in peacetime all our takeoffs are planned with adequate three engine performance in mind. You could argue that a three engine 500 ft/min rate of climb isn't much, but it is sufficient, and your ground run on three engines is always less than runway available, even with partial throttle. Traffic pattern operations also require a 500 ft/min climb rate, so that provides us with that adequate margin. If we have satisfactory performance planned into every takeoff, then what is the problem? The problem is control.

Take a look at the **KC-135** procedure for Engine Failure Takeoff Continued. Notice the first step, the big, bold print letters that say, "**MAINTAIN FLIGHT.**"

While this statement may seem basic or elementary to most pilots, it needs to be reemphasized, because in the history of the tanker there has never been an aircraft crash solely as a result of an engine failure and its associated lack of performance. Lack of control, however, is a totally different matter.

On any KC-135 takeoff, control always needs to be considered. An engine failure will always affect aircraft control to some degree. On a heavy weight, wet takeoff you need to accelerate a large mass to flying speed. To cause this large moving mass to deviate you need a large counteracting force. (An engine loss might provide you with this force.) Once the engine loss occurs and the force is provided, the aircraft flight path or ground track will begin to change. The rate of change will be a factor of the force exerted and the mass moving or more simply stated: The heavier the aircraft, the longer it will take it to deviate. If you allow the deviation to develop however, or increase the force (thrust), it will be that much more difficult to stop the yaw. Again the heavier the moving mass is, the more force required to stop the movement.

A light weight aircraft, on the other hand, presents a bit different problem. The mass is lighter and therefore reacts much more quickly to an engine failure (that opposing force). By the same token, because you have less moving mass to control you can easily recover — if your rudder inputs are timely and correct, and you don't aggravate the condition by prematurely adding additional thrust.

Recovery from an Engine Loss on the Runway

Your primary flight control to correct the yaw caused by a failed engine is always the same — rudder. But how you apply it and which rudder you use obviously depends on a number of situations. Let's first look at the engine failure on the runway, after S_1, but before rotation.

If you have to lose an engine on takeoff, I suppose the best place to lose it is while you are still rolling in the 3 point attitude. When the aircraft is on the ground and an engine is lost, the main response you need to counter is yaw. The aircraft usually doesn't roll, and pitch is obviously not a factor. If yaw then is what we really need to combat, how do we do it? What control do we use and how much do we need to apply?

Simply stated, all you have to do is look out the pilots' windows at the runway and use the appropriate rudder to smoothly steer the aircraft back toward the centerline. If you make it a habit on every takeoff to continually correct to, or stay on the centerline, you may already be putting in the correct rudder at the instant the engine failure occurs and never deviate by more than a few feet. Rudder application should be immediate but controlled. Immediate reaction will be more effective than arbitrarily applying full rudder. Do not attempt to correct back immediately to the centerline unless the aircraft is departing the runway. As the groundspeed increases, the rudder becomes much more effective and once the yaw is stopped the aircraft will correct toward the centerline with no further increase in rudder. Make darned sure the yaw is completely stopped before you rotate, if you possibly can. A dynamic yawing condition as the aircraft is rotated for takeoff will greatly increase your chances of striking the ground with a wing tip or engine pod as a yawing aircraft will invariably cause roll.

Finally, remember that if obstacles pose no problem to your takeoff, you should always consider keeping the aircraft on the runway as long as you possibly can to insure that the yaw is stopped and to allow aircraft to gain additional airspeed. You only need 1000 feet of runway to get airborne, so don't rush your rotation to the point of taking off when the yaw is not completely stopped.

Recovery from an Engine Loss at or After Rotation

An engine failure at or just after rotation is, without a doubt, the most hazardous situation you can be faced with. Once the aircraft is rotated, your only reliable aids to help you control the airplane are your flight instruments, specifically the ball. You'll need to center the ball as soon as you possibly can. If you fail to react or apply rudder incorrectly, yaw will dramatically increase. As little as three seconds delay can result in yaw angles of over 8 degrees and bank angles over 12 degrees.

You will also need to concentrate on pitch. While yaw and roll are being combatted with rudder (and some aileron/spoilers) you may become distracted and fail to notice a small change in pitch. Remember, at take-off speeds, a pitch attitude 2 to 3 degrees in excess of the recommended takeoff attitude may place the airplane is a position from which it can neither climb nor accelerate. A decrease in attitude of as little as 1 to 1½ degrees can cause the aircraft to descend. Either way you're in trouble, so don't forget to maintain 8° to 9° of pitch as you correct yaw.

One final thing about control. Anytime you experience an engine failure you will discover that an increase in airspeed is in your favor. Airspeed is the breath of life. The more airspeed you gain, the more directional control authority you will have. The rudder is obviously more effective as you gain speed, so consider reducing your climb rate slightly (obstacles permitting) to allow airspeed to increase. Remember not to descend as sink rates/descents are difficult to arrest at best.

Next time you look at the weekly 60-9, and are scheduled for a heavy weight takeoff, you should feel a lot better about it. Secure in the knowledge that with proper mental and physical preparation and the proper flight techniques and procedures you can handle any engine failure with ease. If you always attempt to maintain that centerline up to rotation and then concentrate on the ball and pitch attitude during the remainder of the takeoff, you will definitely stack the deck in your favor. Then, if you have an engine failure simply apply the "Fly the Airplane" principle. Doing this will insure that all your takeoffs will lead to happy landings.

Where
Determines W

Capt J. A
3901 SM

At Zulu One Launch Control Center (LCC), 150 miles from Hunoz, 1Lt Run M. Checklist monitored his ten missiles. It was a very busy morning. There had been a maintenance team in the LCC at crew changeover and they finally departed for the base about an hour ago. After running daily inspections and some self-study with his deputy, Run was finally able to concentrate on AFIT work. Having a few minutes to spare or so he thought, he allowed his deputy to lay down for a short nap before evening chow. The only activity remaining in the flight was a missile maintenance team (MMT) at Z-07, replacing a missile guidance set (MGS).

Suddenly an alarm drowned out Run's thoughts. He looked at his status board and glaring out from the display was an illuminated warhead alarm indicator. This was not the first time he had witnessed this status and in his mind, quicker than the time it took to reset the alarm, he had run through the actions he was going to take. Run realized the maintenance team had probably generated this status as they were bringing the missile back to life. He figured the team chief was behind the power curve on a call to the LCC. He quickly processed his technical order steps. . .

"Sgt Tork, I need an authentication."

"Okay sir, I pass you . . . (Good authentication)."

"Looks like you're a good guy, Sgt Tork. We just got a warhead alarm here in the control center. Do you have any reason?"

"Yes sir, we were right in the middle of doing a continuity check. I was just going to call."

"Okay, Sgt Tork, that sounds like a good reason. How long before the warhead alarm status clears?"

"Sir, it's going to clear in just a minute. It will be coming back shortly after that and will cycle on and off for a while. It's part of the spurious signals check."

Congratulating himself on a job well done, Run sits back and hopes he'll be able to finish his linear programming.

At Z-07, Sgt Tork is happy, cold and tired, but happy. This MGS recycle has been a smooth one. He's only been on site five and one half hours. The only interruption occurred when the missile launch crew commander called to coordinate the warhead alarm. How nice it would be, he thought, to be sitting in a warm capsule doing your job. Those capsule crews really had it made. Well, he thought, so much for capsule duty, he still had work to get done. Seeing what his team had already accomplished caused Tork to feel proud of his men. Thanks to their coordinated effort everyone would be able to watch tonight's big football game. He was especially proud of the newest team member. A1C Greenhorn looked like he'd been a missileer all his life even though this was his first "real" MGS swap.

Then the unpredictable happened—a malfunction developed in the Fault Locating Indicator (a portable fault display unit used by maintenance teams) just as the team was wrapping up its checkout. Sgt Tork decided to inform the capsule and check the crew's status indications. . .

"Capsule!"

"Hello sir, I just wanted to let you know that our Fault Locating Indicator has bombed on us and I need to check status with you. How are we looking?"

Run looked at the status board and saw no new indications. The warhead alarm had been explained earlier. "Everything looks 'normal' from here."

"Okay sir, I'll let you go."

Back at Z-01, things had gone crazy! 2Lt Save, Checklist's deputy, was up with the first exercise emergency action message. Ten more followed.

During all of this activity, the crew received an alarm and an illuminated outer security light at Z-10. Now they received a call from the flight security controller

THE CU

telling them that the response team had found several wild turkeys on Z-10!

Sgt Tork is raising the last of the equipment and tools from the launcher. The only things left are to sweep up and start backout procedures. What a team! Sgt Tork decided he would buy the beer for tonight's game.

Things have finally settled down at Z-01. The messages have stopped, the intruders incarcerated, and all contingencies processed. Deputy Save is checking status one final time, when he sees the illuminated warhead alarm.

"Hey boss, what's this light on for?"

Lt Checklist says, "I'd better give those guys a call since we haven't heard from them in a while."

"Sgt Tork, how's it going?"

"Just fine, sir. I was just going to call you. We're ready to back out."

"Wait a minute. What about this warhead alarm?"

"What warhead alarm? I thought you said things were 'normal' earlier."

"I did, but I thought the alarm was still cycling. That's what I meant by 'normal'."

"I wish you had called me sooner, sir."

"Sorry, but we got real busy down here. I'm afraid you'll have to go back in and clear it."

"Understand sir!"

This scenario is not unlike some of the things that crewmembers may witness during an alert. It is presented to show the relationship between where a person "sits" on the job and how it relates to what one can "see." Due to the separation between Minuteman launch facilities and launch control centers it is vitally important that crewmembers and maintenance personnel understand just what they can see while performing their respective duties. There was no way for the MMT to see the warhead alarm illuminated at the LCC. On the other hand, the experienced crewmember has seen the time required to complete an MGS recycle vary by hours.

The team chief thought everything was progressing smoothly. After all, the only abnormal situation that had cropped up was the malfunctioning Fault Locating Indicator, and he had compensated for that by checking status with the crew. He had no way of knowing how busy things had been in the flight area.

The combat crew figured things were going okay at the LF. They couldn't see what was happening at the LF and thought it would be a while before maintenance would be completed. Neither the MMT nor the crew anticipated the conflict that would arise from not being able to "see" what was happening at the other's location.

Whenever critical status is reported from a sortie, it is important for maintenance and operations personnel to discuss this status in detail. This discussion should include exactly what type of status can be expected. Most importantly, an exact time when the status will change should be established. When an exact time can't be given, establish communications at regular intervals. Additional status complicates the situation even more and demands extra attention, coordination and emphasis on the communications process.

Crewmembers as well as maintenance personnel should realize that they can't "see" what is happening at each other's location. Crewmembers can't see how maintenance is progressing and maintenance team members can't see the missile status indicator panel or computer printouts. A crewmember realizing the crew can't see the progress of maintenance, should call to verify that critical status clear when it should. Understanding what we can "see" from where we "sit" can greatly enhance the communication process between operations and maintenance personnel. Whenever you "see" something out of the ordinary from where you "sit" on the job, stop and think — **Can the other person "see" it?**

ou "Sit"
at You "See"

ompton

NG EDGE

CROSS CHECK SIFC

I.A.P. Confusion

SIFC Staff, Castle AFB

We recently received a letter from a tanker pilot who had just returned from a TDY to Saudi Arabia. He was concerned over how to fly one of the approaches into Riyadh. Evidently his crew, and a few others, made the approach and later discovered there was no concensus among them on what was the proper way to fly it. After we reviewed the procedure and the clearance received, we can understand the confusion. Let's set up the scenario and analyze the problem.

The crew was established on B58 inbound to King Khalid VORTAC (Fig. 1). When told by ATC that Riyadh radar was out of service, they requested to fly the ILS/DME RWY 01 approach into Riyadh (Fig. 2). When they were about 10 NM north of the King Khalid VORTAC, the following clearance was received: "Cleared for the ILS/DME RWY 01 approach, maintain 6000, report five miles north of RIY" (controller phonetically spelled "R-I-Y"). STOP! Before reading on, take a good look at the approach plate and figure out how you would comply with this clearance.

Find any problems? Here are some questions the crew had to answer "NOW"!! How do you fly from King Khalid to the IAF? NETAM, the IAF, is defined as 5 DME, but from what NAVAID? What is the DME channel required to fly this approach? You're at "ground speed zero;" imagine yourself less than 3 minutes from King Khalid and no "freeze button."

The crew finally found the RIY VORTAC (Riyadh) on another approach plate (Fig 3) and noted that it was located on the airfield. So, they flew direct to RIY VORTAC, intercepted the localizer outbound to NETAM, and completed the approach. (Oh, they also found the little note on the left side of the ILS/DME IAP stating, "I-RIY DME Chan 40 Colocated with GS," did you?)

Since it's always fun to Monday

FIGURE 1

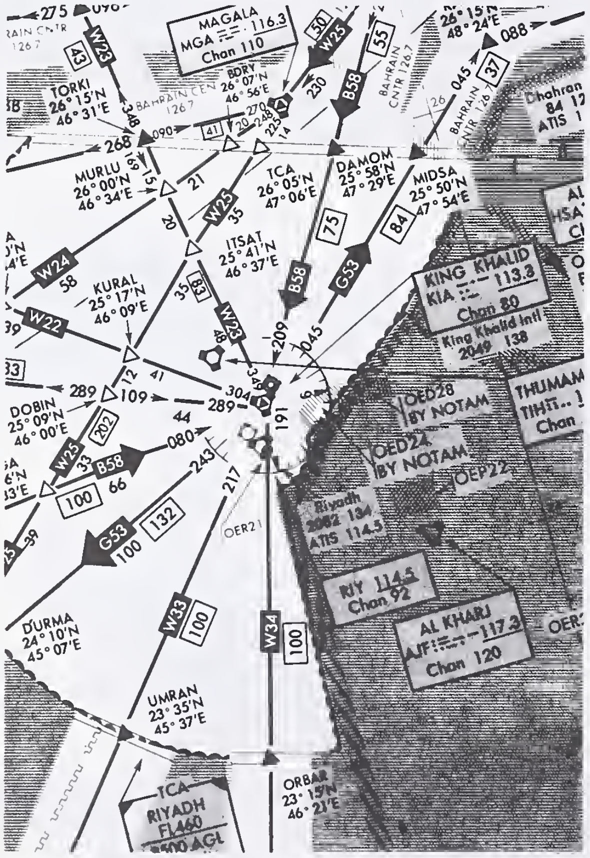
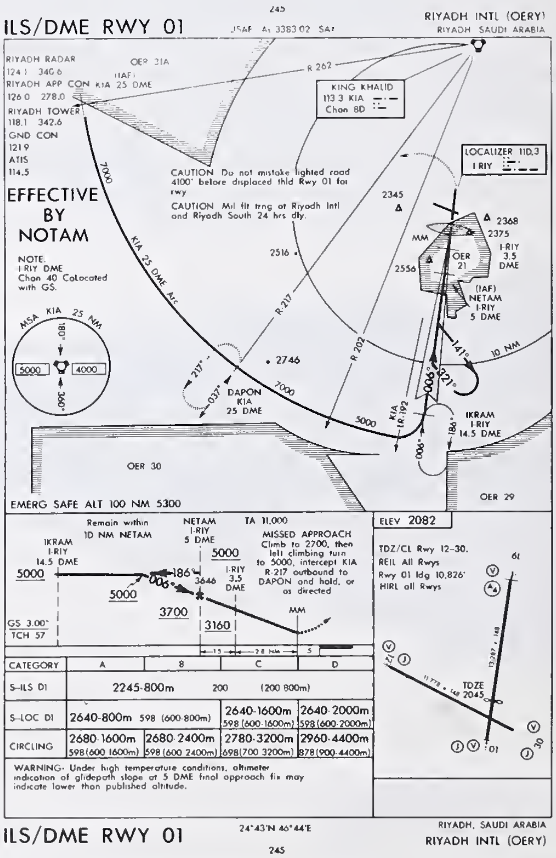


FIGURE 2



CATEGORY	A	B	C	D
S-ILS 01	2245-800m 200 (200-800m)			
S-LOC 01	2640-800m 598 (600-800m)		2640-1600m 598 (600-1600m)	2640-2000m 598 (600-2000m)
CIRCLING	2680-1600m 598 (600-1600m)	2680-2400m 598 (600-2400m)	2780-3200m 698 (700-3200m)	2960-4400m 878 (900-4400m)

WARNING- Under high temperature conditions, altimeter indication of glidepath slope at 5 DME final approach fix may indicate lower than published altitude.

morning quarterback, did they do the right thing? Before we give you an answer, here's some additional information. Look at the same approach published by Jeppesen (Fig. 4). You should note two important differences. First there is terminal routing published in the top right-hand corner from KIA VORTAC to the IAF (NETAM). Second, notice the Riyadh VOR/DME is depicted on the IAP.

NOTE:

Jeppesen IAP's are produced for civilian pilots, and are not normally available for military use. Jeppesen depicts VORTAC's as VOR/DME's because this is compatible with civilian equipment. That's why you don't see any Tacan style DME channels on the IAP, and is one reason why we don't use them. The King Khalid VOR/DME is mislabeled as RIYADH, but the VOR frequency and identifier are correct.

If the DOD IAP had shown Jeppesen's feeder routing, the crew would have had all the information necessary to comply with the clearance. The controller probably expected them to know about the feeder route when he issued the clearance.

Technically then, the crew was incorrect because they accepted a clearance they could not comply with. They weren't cleared to RIY, then outbound on the ILS front course, they were cleared from the King Khalid VORTAC to NETAM. There is no way to fly to NETAM by proceeding direct. NETAM is a fix defined only by the localizer and the associated ILS DME. They were lucky that the route they chose to fly was so close to the feeder route they were unaware of. They were probably never more than ½ mile off course.

As you can see, it's an imperfect world. Both the DOD and Jeppesen IAP's had mistakes or incomplete information on them. You won't know that while you're flying, but you should be able to recognize a clearance that you can't comply with or that you don't understand. When that happens, COMMUNICATE! Make the controller clarify his instructions, or give you a more detailed routing. In this case, an option would have been to request clearance to intercept the 25 DME arc and fly the approach; or request clearance for what they actually flew. Eliminate the confusion factor before you continue. Ironically, all of the anxiety might have been alleviated by a couple of radio transmissions.

Oh yes, SIFC has taken action through the USAF IFC to correct the DOD approach chart, and Jeppesen was notified of the mis-labeled KIA VORTAC. We've identified a couple of errors on these approach charts, but watch out! We'll bet there are a few more floating around just waiting to catch the unsuspecting crew.

FIGURE 3

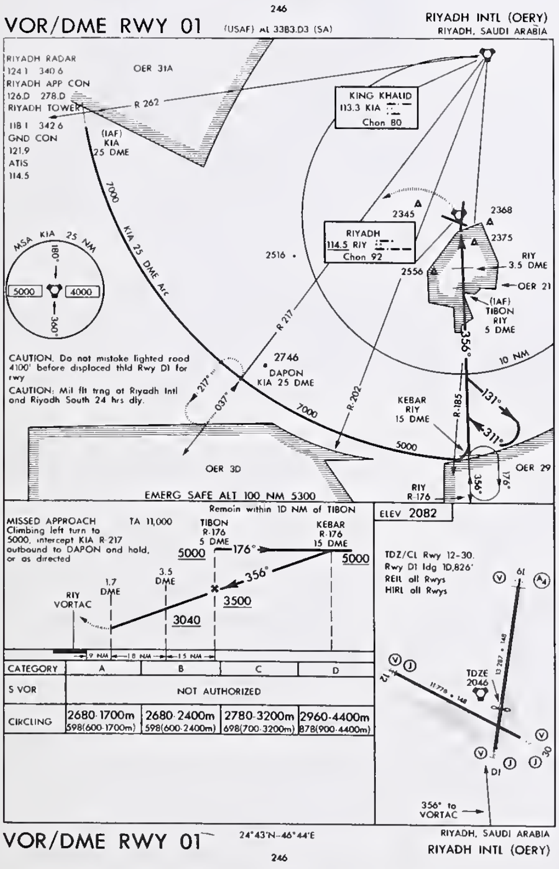
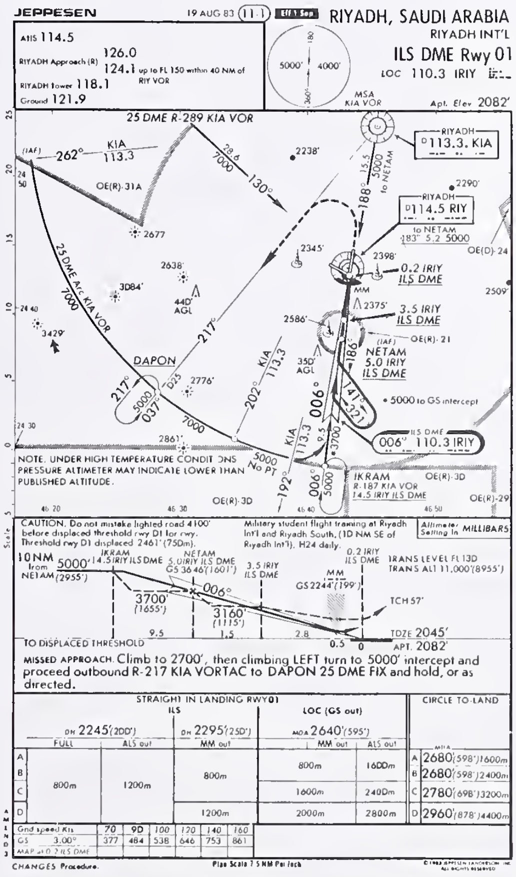

VOR/DME RWY 01
RIYADH INTL (OERY)
RIYADH, SAUDI ARABIA
KING KHALID 113.3 KIA Chan 80
RIYADH 114.5 RIY Chan 92
(IAF) KIA 25 DME
DAPON KIA 25 DME
KEBAR RIY 15 DME
(IAF) TIBON RIY 5 DME
EMERG SAFE ALT 100 NM 5300
ELEV 2082
CAUTION: Do not mistake lighted road 4100' before displaced thld Rwy 01 for rwy
CAUTION: Mil flt trng at Riyadh Intl and Riyadh South 24 hrs dly.
MISSED APPROACH Climbing left turn to 5000, intercept KIA R-217 outbound to DAPON and hold, or as directed
NOT AUTHORIZED
VOR/DME RWY 01
RIYADH, SAUDI ARABIA
RIYADH INTL (OERY)

FIGURE 4


JEPPESEN
19 AUG 83
RIYADH, SAUDI ARABIA
RIYADH INT'L
ILS DME Rwy 01
LOC 110.3 IRIY
ATIS 114.5
Riyadh Approach (R) 126.0 124.1
Riyadh Tower 118.1
Ground 121.9
25 DME R-289 KIA VOR
RIYADH 113.3 KIA
RIYADH 114.5 RIY
DAPON
NETAM 5.0 IRIY ILS DME
IKRAM R-187 KIA VOR 14.5 IRIY ILS DME
NOTE: UNDER HIGH TEMPERATURE CONDITIONS PRESSURE ALTIMETER MAY INDICATE LOWER THAN PUBLISHED ALTITUDE.
MISSED APPROACH: Climb to 2700', then climbing LEFT turn to 5000' intercept and proceed outbound R-217 KIA VORTAC to DAPON 25 DME FIX and hold, or as directed.
STRAIGHT-IN LANDING RWY 01
CIRCLE-TO-LAND

SAC Tactics School
Nellis AFB

Proposal: Tactics Team Concept

The SAC Tactics School, although just approaching the midpoint of its first year of instruction, has already broadened the scope of its student population. The initial school concept was to train only unit tactics officers, but was quickly expanded to include unit intelligence personnel and other wing staff operational personnel whose expertise is imperative to an effective wing tactics program.

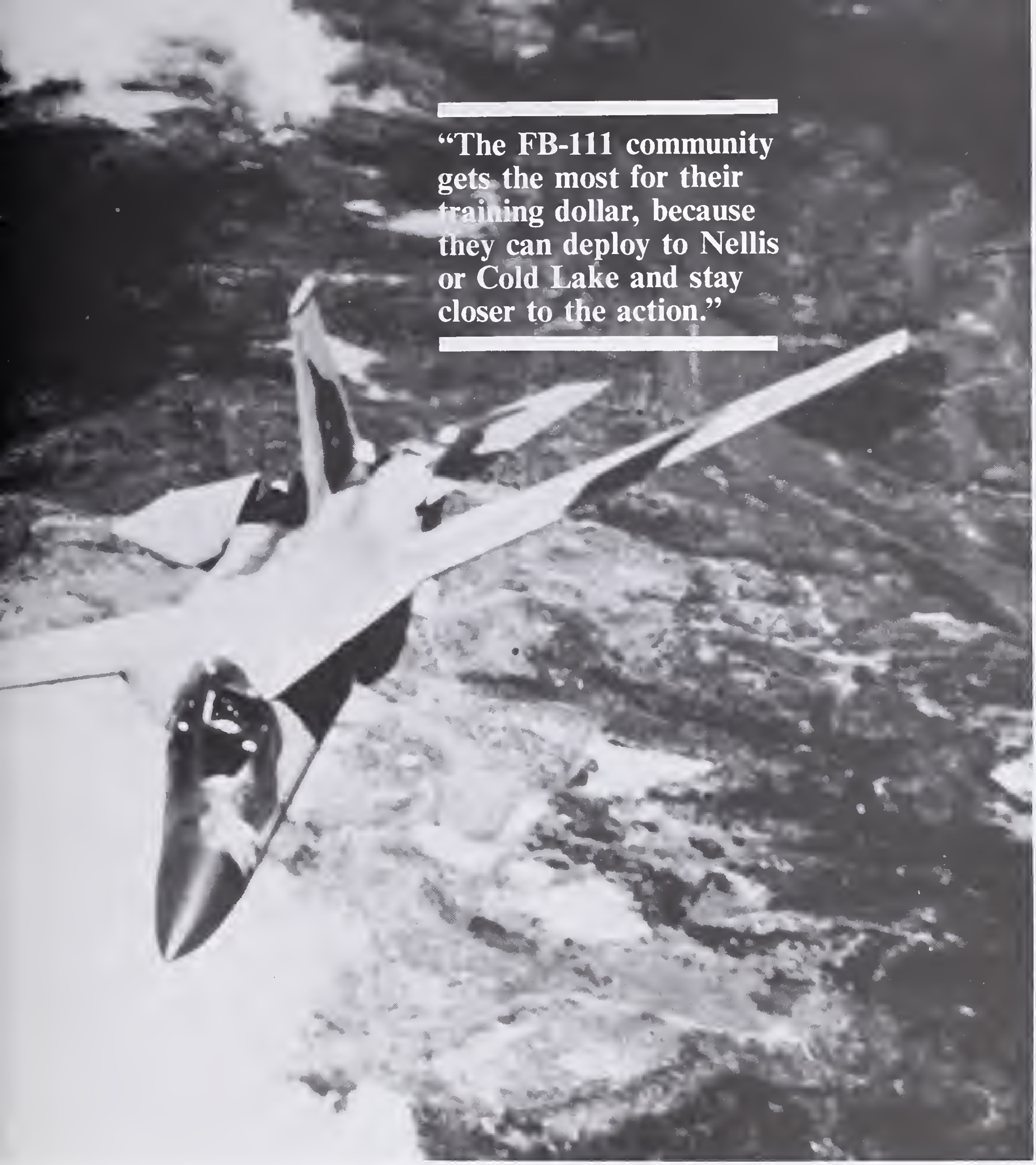
The tactics team concept takes a core of wing operations and intelligence personnel and prepares them to develop and maintain a unit tactics program. The Tactics School mission is to build on the expertise of these individuals through formalized training. Once this training is completed, the unit tactics team can then provide the appropriate emphasis during day to day aircrew training. While combat tactics remain every crewmember's business, the unit tactics team would assume responsibility for administering the training program.

Who are the tactics team members and what would they do? The principal members at the wing would include: The Wing Tactics Officers, Combat Intelligence (INZ), DOXE, DONB, DONBW, and DONP. Obviously, others needed to maximize the wing's tactics program are WST/OFT instructors, training flight, stan/eval and aircrew members. The principals would consult with them to ensure they contribute their expertise to the unit program development.

Current unit organizational structure has the key tactics people dispersed among the staff divisions. To bring focus to the unit's program, the tactics team must use creative means to emphasize tactics. Established bodies such as the Wing Tactics Panel and training panels or AD HOC committees can serve as effective forums for tactics discussion and organization of unit tactics programs. This will also give unity of purpose to the team concept and prevent parochial views and "turf wars" from detracting from the program.

The Unit Tactics Program should be tailored to the unit's mission, but more importantly, it must meet aircrew requirements. This is not to be another training program demanding even more of the precious time an aircrew can devote to training. It is rather a reorientation or improvement in the ground, simulator, and flight training already scheduled. The unit program should emphasize the threat, our capability against the threat, and aircrew coordination in a combat environment. All training time and devices must be dedicated to realistic, meaningful combat training.

This approach requires an aggressive, enthusiastic tactics team to manage the unit program. Most of us realize that combat, whether EWO or conventional, will be more strenuous than the present Strategic Training Range (STR) missions. The challenge to the tactics team is not only to make STR missions more "fly like we're going to fight" but also to maximize the training offered during RED FLAG, MAPLE FLAG, QUICK FORCE and other ongoing tactics training exercises in which SAC participates. The tactics team can prepare the flight crews to take maximum advantage of these missions, then be on-board (safety



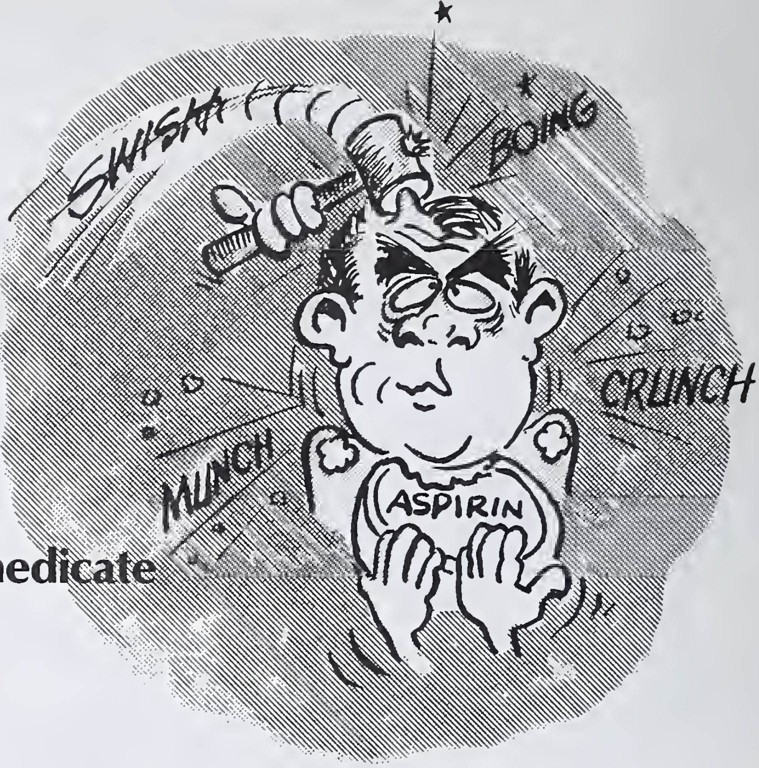
> **"The FB-111 community gets the most for their training dollar, because they can deploy to Nellis or Cold Lake and stay closer to the action."**

observer instructor, etc.) to complete the loop in tactics training. This will turn just another trip across the Nellis Range Complex into a more meaningful and rewarding experience. The FB-111 community gets the most for their training dollar, because they can deploy to Nellis or Cold Lake and stay closer to the action. This affords their tactics team the opportunity to become totally involved in tactics training.

While the tactics team will add impetus to the Unit Tactics Program, aircrew involvement is paramount. Aircrews must realize they **ARE** combat crews and susceptible to worldwide deployment on a moment's notice. To "improve the odds" on a combat mission all crewmembers must be threat-wise (not just EWs and gunners). Study intelligence documents, read the fine print in SAC TAC Doctrine and understand that tactics require a dynamic decision making process. What worked today may not work tomorrow. Once again, the tactics team can greatly aid the aircrews quest for knowledge and improve their chances of completing their mission and surviving.

As you can see, a dynamic unit tactics training program is a must to meet combat mission requirements. It demands a dedicated unit tactics team, enthusiastic and involved aircrews, and a concerned and supportive senior staff. The SAC Tactics School mission is to train and support your unit tactics team and we stand ready to help in any way we can. Let us know how your tactics program is developing to fill your combat training needs. If you have questions, recommendations for other units, etc., just give us a call (AV 682-6886/6841).

Not Now, I've Got a Headache



To self-medicate or not self-medicate

Lt Col Ken Dozier
HQ SAC/SGPF

“The flight surgeon who has himself/herself as a doctor has a fool for a patient.” That's right, you say! But, just a minute. The same goes for aircrew members. Treating yourself is not only foolish but may be illegal.

In the last few years we've read of several military aircraft mishaps in which the crewmembers were found to have blood or urine levels of cold medicines, sleeping medications, and even a medication used to control epilepsy. The latter was taken to induce sleep. Now, I realize SAC crews are too intelligent to do such dumb things. I would, however, like to explore two medications that we've all used, and about which the regulations are unclear, i.e., aspirin and acetaminophen (such as in Tylenol, Datril, Excedrin, etc.).

For the last year, I've noted aspirin and acetaminophen in the blood samples taken from a few SAC aircrews, after physiologic incidents and Class A and B mishaps. In all but one case, the aspirin or Tylenol was taken for a headache. You are correct. Taking an **occasional** aspirin or Tylenol for a headache is not prohibited by regulation; however, you can be assured those crewmembers endured a great deal of questioning. "Why did you fly with a headache, how severe was the headache, did it make you nauseous, did it affect your vision, did it make you lose your ability to concentrate, etc.?" Got the idea? I'm concerned, as you should be, about the symptoms you are trying to alleviate or cover up. Sometimes a severe viral infection can begin as a headache. To assume an aspirin or Tylenol is all you need may backfire on you if that headache is part and parcel of a case of gastroenteritis (no pun intended). I won't bore you with other examples, but suffice it to say that headaches can be the forerunners of other symptoms that aren't conducive to a six- to eight-hour mission, low-level flying, refueling, or several hours of transition.

What about that other case in which the flyer took aspirin for other than a headache? There is a theory that regular low doses of aspirin may prevent coronary artery disease (heart attack). Our case in point was convinced of this and took aspirin on a daily basis. This flyer may have clean coronary arteries (?), but what are the risks he/she acquired? Aspirin is a blood thinner. Too much can inhibit blood clotting. Without proper monitoring, this crewmember could be in grave danger of a serious or life-threatening hemorrhage secondary to an accident. Aspirin can also irritate the lining of the stomach and cause an ulcer. Ulcers are usually associated with severe pain. Again, I won't bore you with additional possible or unexpected complications from taking aspirin, but there are more. There are also serious risks from the misuse of acetaminophen.

Lest I be misunderstood, let me summarize on the topic of self-medication, and on aspirin and acetaminophen.

- It is legal to take an **occasional** aspirin or acetaminophen and fly. **However,** is that aspirin or Tylenol going to temporarily mask a symptom of a more serious problem? Go see your flight surgeon; that's what he/she's there for.
- Other than on an occasional basis, the use of aspirin or Tylenol should be considered in the category of illegal self-medication.
- All other medications must be cleared by the flight surgeon. This will include going through the appropriate testing and waiver procedures.

Learn About Flying From This!

The Tides Reach Hotel at South Sands, Salcombe, Devon, features a fresh water pond some 40 yards from the high tide mark. The pond is constantly refreshed by a small stream and features 54 Chinese carp and 30 or so Mallard drakes and ducks.

In May, a majority of the ducks were upstream privately hatching their broods. The drakes, their alloted task fulfilled, lazed round the pond, although the odd drake was still wooing and hoping to win. The pond to the sea side is sheltered by a wall and hedge 10 feet high; to the north stands the hotel, and the remainder is screened by trees some 30 feet high. All attempts to land on the pond into the standard offshore breeze are tricky, and call for a high approach over the trees, into the turbulence created by the protective hedge onto a target less than 50 yards long.

On the day in question, the offshore breeze was a force seven gale. A majority of the drakes remained grounded. The ducks were otherwise involved. However, at midmorning a drake appeared over the trees flying hard into the gale. He dropped like a stone into the shelter of the trees, reduced his now considerable forward momentum with some most dexterous wing work, and landed within three feet of the front edge of the pond, veering hard left as he did so to avoid hitting the bank; the safe landing was almost skillfully done, but an accident had been a near thing.

Fifteen seconds later an attempt by a duck was less masterly, and at the very last second, she overshot, to be followed immediately afterwards by a second duck suffering a similar fate. Each made a further two approaches, trying different techniques, never managing to beat the tricky wind conditions, but always overshooting in good time to clear the hedge. Throughout, the drake looked on anxiously, getting progressively more agitated. After the sixth overshoot, the drake launched into the air.

Some two minutes later, a Vicformation of three appeared; the drake leading the two ducks. The approach was good considering the conditions, and the drake would have made it; perhaps he was stronger, his wing area greater, his power to decelerate better, but as the round out approached, his ladies started to go high on the critical flightpath, and they were in danger of crash landing. The drake saw their problem, and he elected to overshoot the formation. He steered his formation to a safe landing in the sea immediately on the wrong side of the hedge.

Five minutes later, a team of three, the drake followed by two ducks, wadled into view. Squawking loudly, they padded across the road, round the trees, and followed the footpath into the pond. The drake was still in command of his small harem. His swagger and general manner indicated that he was giving a very thorough debrief. In extreme conditions, there had been no flying accidents. Here was a sound lesson for all who fly.

There are obviously some days when a safe approach is simply impossible. On such days, an alternative safe recovery must be found. We could all learn about flying from that. — Courtesy Air Clues, Oct. 84.

Aircraft Maintenance

TSgt Gerald L. Osborn, 97 BMW, Blytheville AFB, is SAC's Maintenance Airman of the Month.

Sgt Osborn's exceptional performance, initiative, technical abilities and leadership have been invaluable assets to the OAS/BNS Maintenance Shop. The constant drive which he displays is indicative of his team spirit and true dedication to the mission. Maintaining the AN/ASN-479AX Line Replaceable Unit (LRU) test set is paramount in this shop's ability to meet the mission requirements. Using his initiative and technical knowledge, Sgt Osborn has overseen maintenance operations and insured that the Automated Test Set is "on-line" and operating at maximum capacity. This has circumvented unnecessary, time consuming cannibalizations and deviations in scheduled bomber sorties.

Sgt Osborn can be relied on to consistently give 100%. His management and leadership abilities enabled the Mission System Branch to achieve an Outstanding rating during the April 1985 Operational Readiness Inspection (ORI) and an error-free Management Effectiveness Inspection (MEI). The nearly flawless operation of aircraft systems enabled the wing to score the highest Damage Expectancy rating in SAC's history, ample testimony to the quality of the LRUs maintained by Sgt Osborn. His efforts contributed directly to the Excellent rating of both the 97th Avionics Maintenance Squadron and the Maintenance Deputate. Not only were the bombing results the "best ever recorded," but the "Outstanding" rating was the first such rating awarded to a Mission Systems Branch within the past five years.

Missile Maintenance

SSgt Andre T. Charron, 91 SMW, Minot AFB, is the SAC ICBM Maintenance Airman of the Month. Sgt Charron is in charge of 42 weapon system trainers, including an off-base training launch facility. He was personally responsible for the trainer maintenance section receiving its third consecutive "Excellent" rating by 3901st Strategic Missile Evaluation Squadron (SMES). Sgt Charron coordinated and implemented a program which revitalized and enhanced the entrance-way of the on-base training LF, through the use of hand-painted murals. He was directly responsible for the Power and Environmental Control Systems Trainer being error-free and the off-base training LF receiving only three minor discrepancies. His monitoring of daily maintenance efforts and all trainer discrepancies, using the EMDAS computer terminal, contributed immensely to the Training Control Division winning the AFA Outstanding Achievement award for 1984.

Missile Crew

The 308 SMW Crew S-232, Capt Kenneth D. Delouche, MCCC; 2Lt Moira M. McCain, DMCCC; SSgt Mark J. Kelley, MSAT; and TSgt Peter F. Morrison, MFT, is SAC's Missile Crew of the Month.

While on strategic alert recently, crew S-232's poise under extreme pressure defused a potentially hazardous situation, averting the real possibility of personnel injury and damage to complex equipment. Following silo blast valve checkout procedures, the crew was alerted to a silo blast valve malfunction. Acting quickly and decisively, the crew dispatched to troubleshoot the malfunction. They discovered blast valve number two had drifted partially closed resulting in restricted air flow exiting the silo equipment area, which, in turn, degrades the positive air balance and causes the possibility of a buildup of hazardous vapors in the equipment area and control center. Because the blast valve was partially closed, the hydraulic pressurization unit, which provides the energy to open and close the blast valves, was short cycling due to its attempt to return the blast valve to the open position. This caused the unit to overheat dangerously, which, combined with resultant loss of hydraulic fluid viscosity and a pressure buildup in fluid lines, presented an imminent flash fire hazard in the silo equipment area. The crew immediately removed power from the pressurization unit to alleviate the fire hazard. After allowing the equipment to cool down, they rechecked the equipment and successfully restarted the equipment without any further hazard. The quick reactions and poise under extreme stress demonstrated by crew S-232 prevented a potentially hazardous situation from turning into a disaster.

Munitions Maintenance

SSgt Christine D. Woolley, 9 SRW, Beale AFB, is SAC Munitions Maintenance Airman of the Month.

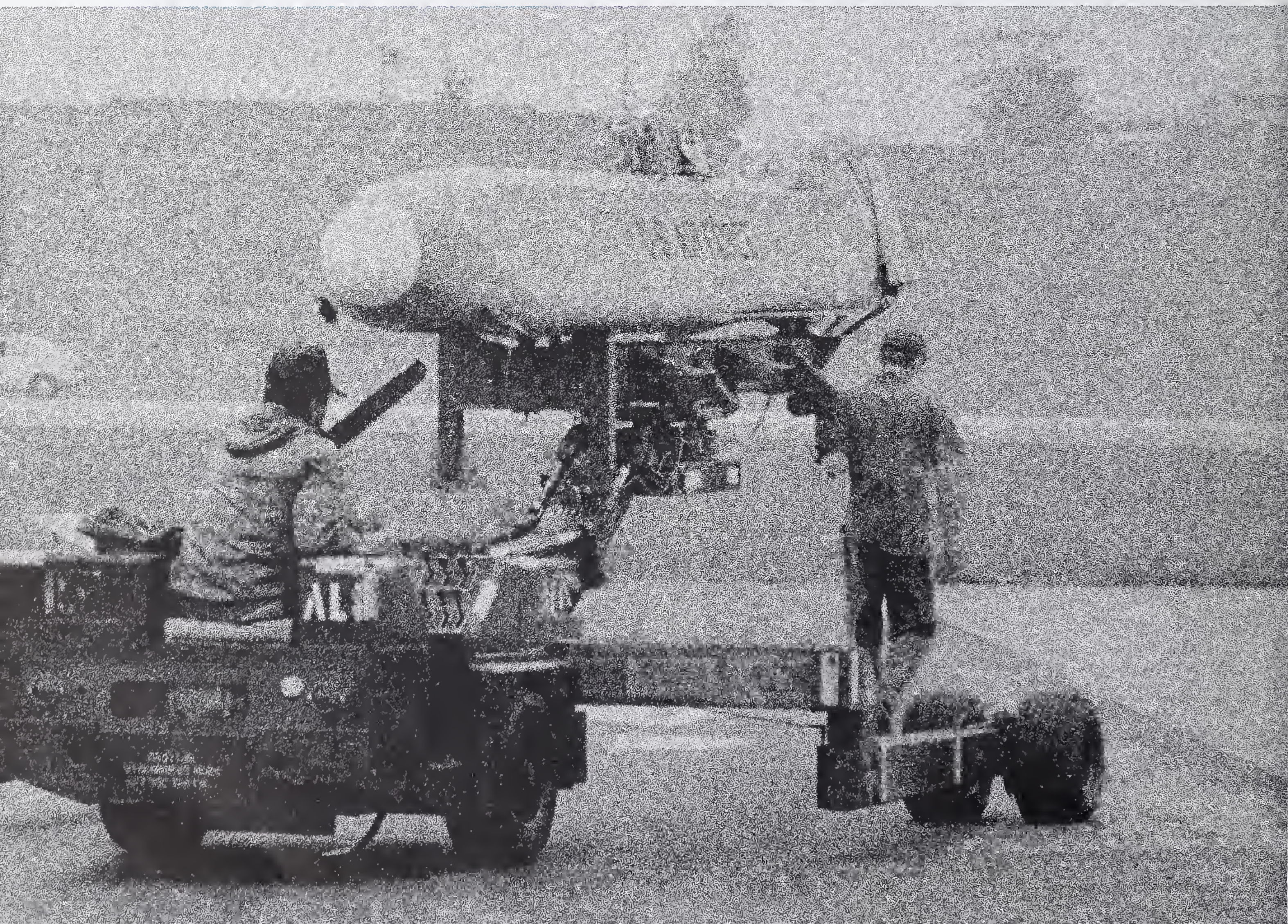
Sgt Woolley's duties as a munitions inspector include pre-issue, periodic shipping, receiving and returned munitions inspections on over 190 munition line items. She is also required to store, maintain, and deliver these munitions to the using activities. Sgt Woolley also performs inspections on CAD and PAD items that are used only on the SR-71/U-2R aircraft. Her dedication and safety-conscious attitude insures that vital components for the egress systems are safe and ready to use. In fact, the exemplary performance of Sgt Woolley has resulted in an excellent rating on the last three 9 SRW Maintenance Standardization Evaluations for the Munitions Section. Her superior knowledge and leadership in the munitions career field are the reasons she was selected to be the Squadron Explosive Safety NCO and a Quality Control Evaluator. Sgt Woolley also provides explosive safety training for personnel in other units who are required to handle or transport munitions. As the squadron QC evaluator, she performs over the shoulder and after the fact inspections on work done by personnel in the munitions storage area.

SAFETY CROSS FEED

WEAPONS SAFETY

Too Close for Comfort

Insufficient clearance between the pylon and pylon loading adapter resulted in damage to two air launched cruise missles. One missile was locally repaired; the other was returned to the contractor facility.



GROUND SAFETY

A Jolting Development

A civilian employee, tired of waiting for a technician, decided to repair the switch on his spray gun himself. The short he overlooked became apparent when he tried out the gun — the shock knocked him backward approximately 15 feet.

Hot Hands

An airman washed his hands with windshield washer fluid and shortly thereafter began to burn some paper. In the process, his right hand caught fire. He attempted to extinguish it with his left hand which also ignited. He suffered severe burns.

Tennis is a Contact Sport

A SSgt riding his bicycle to the tennis courts suspended his racket from the handle bars. It began swinging back and forth and suddenly became lodged in the spokes of the front wheel. The resulting crash threw him over the handle bars and broke his arm.

Driving While Loaded

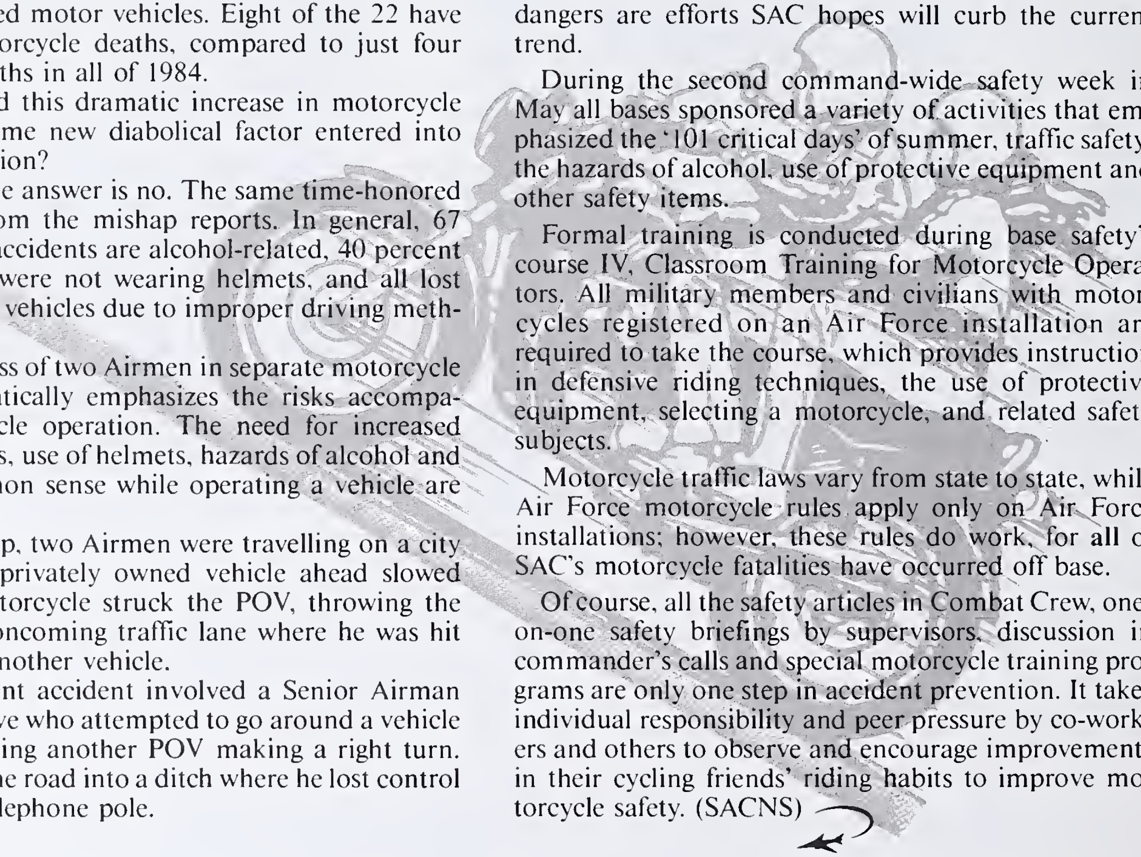
A SSgt was transporting a loaded rifle in a scabbard attached to his motorcycle. Riding over a rough stretch of road, the rifle discharged, striking him in the lower leg.

Read the Instructions — First

A SrA sustained a severe cut to his right thumb while doing woodworking at home. The saw blade hit a knot in the wood, causing it to trade places with his hand. That's why the instructors say to use a pusher — not your hand.

TWO WHEELERS,

Eight deaths through July 1985 involving motorcycles.



Sad, isn't it? Of the 29 fatalities in SAC this year, 22 involved motor vehicles. Eight of the 22 have been motorcycle deaths, compared to just four motorcycle deaths in all of 1984.

What's fueled this dramatic increase in motorcycle deaths? Has some new diabolical factor entered into this grim equation?

Sad to say, the answer is no. The same time-honored causes glare from the mishap reports. In general, 67 percent of the accidents are alcohol-related, 40 percent of the victims were not wearing helmets, and all lost control of their vehicles due to improper driving methods.

The recent loss of two Airmen in separate motorcycle mishaps dramatically emphasizes the risks accompanying motorcycle operation. The need for increased safety awareness, use of helmets, hazards of alcohol and applying common sense while operating a vehicle are evident.

In one mishap, two Airmen were travelling on a city street when a privately owned vehicle ahead slowed down. The motorcycle struck the POV, throwing the rider into the oncoming traffic lane where he was hit and killed by another vehicle.

Another recent accident involved a Senior Airman on terminal leave who attempted to go around a vehicle which was passing another POV making a right turn. He drifted off the road into a ditch where he lost control and struck a telephone pole.

Formal training and continued education on riding dangers are efforts SAC hopes will curb the current trend.

During the second command-wide safety week in May all bases sponsored a variety of activities that emphasized the '101 critical days' of summer, traffic safety, the hazards of alcohol, use of protective equipment and other safety items.

Formal training is conducted during base safety's course IV, Classroom Training for Motorcycle Operators. All military members and civilians with motorcycles registered on an Air Force installation are required to take the course, which provides instruction in defensive riding techniques, the use of protective equipment, selecting a motorcycle, and related safety subjects.

Motorcycle traffic laws vary from state to state, while Air Force motorcycle rules apply only on Air Force installations; however, these rules do work, for all of SAC's motorcycle fatalities have occurred off base.

Of course, all the safety articles in Combat Crew, one-on-one safety briefings by supervisors, discussion in commander's calls and special motorcycle training programs are only one step in accident prevention. It takes individual responsibility and peer pressure by co-workers and others to observe and encourage improvements in their cycling friends' riding habits to improve motorcycle safety. (SACNS)

BEWARE!

SAC SAFETY SCREEN

The SAC Safety Screen is an honor roll of SAC's most professional crews. To gain listing on the Screen, crew members must be nominated by their unit commanders and meet high selection criteria of experience in their aircraft or missile system *IAW AFR 127-2/SS1.*

349 AREFS, Beale Crew E-112: Capt Phillip B Collins Jr, 1Lt Rodney M Pearsall, 1Lt Randall L Black, SSgt Constance S Olsund

917 AREFS, Dyess Crew S-102: EP Capt David A Brown, CP 1Lt Richard J Galiata, EN Capt Gary A Hagler, EB TSgt Michael G Dunn

917 AREFS, Dyess Crew R-131: AC Capt Peter F Szabo, CP Capt Matthew S Solum, N 2Lt Mark A Clark, IBO SSgt Merri S Keister

328 BMS, Castle Crew: IP Maj Timothy G Krysiak, IRN Capt John Q Barnard III, IEW Capt Paul R Knoll, IG SSgt Peter T Hiracheta

93 AREFS, Castle Crew: IP Capt John Haverstock, IN Capt Billy Cook, IBO SSgt Jim Sigl

351 SMW, Whiteman Crew E-176: MCCC 1Lt Thomas W Walker, DMCCC 2Lt Kevin L Pollock

308 SMW, Little Rock Crew R-150: MCCC Capt Scott R Papp, DMCCC 2Lt Richard J Brunje Jr, MSAT A1C Robert M Raufeisen, MFT A1C Steven Marback

308 SMW, Little Rock Crew R-180: MCCC Capt Gordon E Kalscheur, DMCCC 2Lt Barry K Smith, MSAT A1C Edward R Corcoran, MFT A1C Dion P Hamilton

381 SMW, McConnell Crew E-042: MCCC 1Lt James W McLaurin, DMCCC 1Lt Larry Montavo, MSAT A1C Kelley L Decker, MFT Sgt Daniel L Sigrist

381 SMW, McConnell Crew S-191: MCCC 1Lt Kelvin J Handy, DMCCC Capt Sheila L Schrock, MSAT SrA Edward Hozian, MFT A1C Ronald K Drewke

351 SMW, Whiteman Crew R-050: MCCC Capt Tracy A Hardwick, DMCCC 2Lt Alan W Burke

91 SMW, Minot Crew S-021: MCCC Capt Larry J Simmons, DMCCC 1Lt David L Reynolds

91 SMW, Minot Crew R-013: MCCC 1Lt Robert L Miller, DMCCC 2Lt James T Popham

341 SMW, Malmstrom Crew R-084: MCCC Capt Robert A Molina, DMCCC 2Lt Robert E Poliquin

90 SMW, F E Warren Crew R-123: MCCC 1Lt Dean C Jackson, DMCCC 2Lt Richard L Shelton

320 BMW, Mather Crew R-106: IP Capt William R Saunders, CP 2Lt William S Davis, N Capt Jimmy G Ellis, BO SSgt Richard E Davis

320 BMW, Mather Crew E-115: P Capt Duan P Shefler, CP 1Lt Stephen N Lewis, N 2Lt Timothy L Gaynor, BO TSgt Brian E Towle

24 SRS, Eielson Crew S-02: IP Maj David R Lambert, CP Capt Elden J Kocourek, N-1 Capt Robert M Lyles, N-2 1Lt Robert C Mills

24 SRS, Eielson Crew S-11: TC Capt James L Small, R1 Capt Charles W Gill, R2 1Lt Gregg A Garrison, R4 1Lt Ernest R Lake, MT Capt Mark F Wilmes, PT TSgt Steven S Wiseman, ET SSgt William D Pickle

128 AREFG, Gen Mitchell Fld, Milwaukee, WI: IP Maj Robert L Harris, FP Capt Timothy J Shannon, N 1Lt John W Mueller, BO MSgt John R Famularo

9 AREFS, March Crew: P Capt Steven W Brown, CP Capt James D Lynd, FE TSgt Robert J Packney, BO TSgt Charles E Thomason

9 AREFS, March Crew: P Capt Norman E Johnson, CP Capt John W Bronk, FE SSgt Ronald M Davis, BO SSgt Sven T Gustavson

22 AREFS, March Crew E-134: FP Capt Donald R Cavin, CP Capt Mary B Shagena, NN 1Lt Mark C Dickinson, IB Sgt Marc E Hoff

22 AREFS, March Crew R-124: FP Capt Leroy B Dunkelberger II, CP 2Lt Ronald A Hostettler, NN 1Lt Eric D Karge, BO Sgt Laurie A Kent

FLARE

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Recipe for
COLLISION COCKTAIL

- 1 MAN
- 1 CAR
- GARNISH WITH ALCOHOL
- ADD A DASH OF SPEED